Signature

PTO/SB/05 (03-05) Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the	e Paperwork	Reduction Act of 1995,	, no persons are requ	ired to resp	ond to a collection o	f information ι	ınless it d	lisplays a valid OMB co	ntrol number
			Attorney Docket No.		501.42869X00			10/	
PATENT APPLICATION			First Inve	tor CHAKIHA		RA. HIR	ZAKU	22	
TD AMORETT AL				A SEMICONDUCTOR MEMORY DEVICE AND A METHOD OF MANUFACTURING					
(Only for new nonprovisional applications under 37 CFR 1.53(b))				THE SAME, A METHOD OF MANUFACTURING A VERTICAL MISFET AND A VERTICAL MISFET, AND A METHOD OF MANUFACTURING A SEMICONDUCTOR DEVICE AND A SEMICONDUCTOR DEVICE					
					Mail Label No.				
	A	PPLICATION ELEM	MENTS		Assistant Commissioner for Patents				
SEE MPE	P chapter 6	00 concerning utility i	patent application c	ontents.	ADDRESS	ADDRESS TO: Box Patent Application Washington, DC 20231			
1. Fee	e Transmittal omit en original and	smittal Form (e.g., PTO/SB/17) ginel and a duplicate for fee processing)				CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)			
	plicant claims e 37 CFR 1.2	s small entity status. 77.			Nucleotide and/or Amino Acid Sequence Submission fif applicable, all necessary) a. Computer Readable Form (CRF)				
	ecification		otal Pages: 190]		b. Specification Sequence Listing on:				
	erred arrangement set ESCriptive title	of the invention			i	☐ CD-ROM	or CD-R	(2 copies); or	
-Cr	oss Referen	ce to Related Application			ii □ paper				
-Re	eference to s	equence listing, a table program listing appendi	ı,		c. Stat	c. Statements verifying identity of above copies			
	-	the Invention of the Invention			AC	ACCOMPANYING APPLICATION PARTS			
-Brief Description of the Drawings (if filed) -Detailed Description				57					
-Cl	aim(s)	•			9. Assi	gnment Paper	s (cover	sheet & documents(s))	
12	estract of the awing(s) (35		otal Pages: 104]			FR 3.73(b) St in there is an a		Power of Attor	ney
		-	otal Pages: 5]		11. Engl		-	ent (<i>i<u>f</u> applicable</i>)	
5. Oath or De a X		[/ (ed (original or copy)	otal Pages: <u>a</u> j		12. Information Disclosure Copies of IDS Citations Statement (IDS)/PTO-1449				
		rior application (37 CFI	,		L 52	minary Amen			
	(for continua	tion/divisional with Box	18 completed)			14. Return Receipt Postcard (MPEP 503)			
i.		TION OF INVENT	` '		[ZZ .	(Should be specifically itemized) 15. Certified Copy of Priority Document(s)			
		statement attached del in the prior application,				15. Certified Copy of Priority Document(s) (if foreign priority is claimed)			
_	1.63(d)((2) and 1.33(b)			16. Nonpublication Request under 35 U.S.C. 122				
6. Ap	plication Data	a Sheet. See 37 CFR	1.76		or its	(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.			
 					17. Other: Figs. 1-113, Credit Card Payment Form y the requisite information below and in a preliminary amendment,				
				k, and sup	ply the requisite in	nformation b	elow an	d in a preliminary an	nendment,
	or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) of prior application No.:								
Prior application					-				
For CONTINU	IATION OR I	DIVISIONAL APPS on	ly: The entire discle	sure of the	e prior application,	from which a	n oath o	r declaration is suppli	ed under
Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.									
19. CORRESPONDENCE ADDRESS									
Customer Number or Bar Code Label (Insert Customer No. or Attach bar					n bar code label here		Correspo	ndence address below	
Name ANTONELLI, TERRY, STOUT & KRAUS, LLP									
Address City				State			Zip		
					(700) 017		Code	(700) 212 222	
Country Name	Gregory	E. Montone		elephone	(703) 312-6600 Registration No. (A	Attorney/Agen	Fax	(703) 312-6666 28,141	

Burden Hour Statement: This form is estimated to take .2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

Date

July 30, 2003

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

	15
3	É
=	ľ
≅	F
Ξį	r
~	Ļ
	E

FEE	TR	AN	SM	IT.	TAL
1	for	FY	200)3	

SUBMITTED BY

Name (Print/Type)

Signature

Gregory E. Montone

 λ e

Complete if Kn wn Application Number Filing Date July 30, 2003 First Named Inventor CHAKIHARA, HIRAKU Examiner Name

Complete (if applicable)

Telephone

Date

703-312-6600

07/30/2003

Effective 01/01/2003. Patent fees are subject to annual revision. Art Unit Applicant claims small entity status. See 37 CFR 1.27 501.42869X00 Attorney Docket No. TOTAL AMOUNT OF PAYMENT (\$) 2.728.00FEE CALCULATION (continued) METHOD OF PAYMENT (check all that apply) □ Check ☑ Credit Card □ Money Order □ Other □ None 3. ADDITIONAL FEES Small Large Deposit Account: Entity Entity Fee Fee Fee Deposit Account Number 01-2135 Code (\$) Code (\$) **Fee Description** Fee Paid Deposit Account Name Antonelli, Terry, Stout & Kraus, LLP 1051 130 2051 65 Surcharge - late filing fee or oath The Commissioner authorized to: (check all that apply) 1052 50 2052 25 Surcharge - late provisional filing fee or cover sheet Charge any additional fee(s) during the pendency of this Non-English specification 1053 1053 130 130 application 1812 Charge fees indicated below, except for the filing fee 1812 2.520 2.520 For filing a request for ex parte reexamination to the above-identified deposit account. 1804 Requesting publication of SIR prior to 1804 9201 920 Examination action **FEE CALCULATION** 1805 1.840* 1805 1,840*Requesting publication of SIR after 1. BASIC FILING FEE Examiner action Large Entity **Small Entity** 1251 2251 110 Extension for reply within first month Fee Fee **Fee Description** Fee Paid 1252 410 2252 205 Extension for reply within second month Code (\$) Code (\$) 750.00 2001 375 Utility filing fee 1001 750 1253 930 2253 465 Extension for reply within third month 1002 330 2002 165 Design filing fee 1254 1,450 2254 Extension for reply within fourth month 725 2003 260 Plant filing fee 520 1003 1255 1,970 2255 985 Extension for reply within fifth month 2004 375 Reissue filing fee 1004 750 1401 320 2401 160 Notice of Appeal 160 2005 80 Provisional filing fee 1005 1402 320 2402 160 Filing a brief in support of an appeal 1403 280 2403 140 Request for oral hearing 750.00 SUBTOTAL (1) 1451 1,510 1451 1,510 Petition to institute a public use proceeding 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE Petition to revive - unavoidable 1452 110 2452 55 Fee from 1453 2453 1.300 650 Petition to revive - unintentional Extra Claims Fee Paid below 1501 1.300 2501 650 Utility issue fee (or reissue) Total Claims 53 -20** = 33x 18 594 00 1502 470 2502 235 Design issue fee Indep. 19 -3** = 16 x 84 1.344.00 Claims 1503 630 2503 315 Plant issue fee 1406 130 Petitions to the Commissioner Multiple Dependent 280 1460 130 1807 50 1807 Processing fee under 37 CFR 1.17(g) 50 Entity Small Entity Large Submission of Information Disclosure Stmt 1806 180 1806 180 . Fee Description Fee Fee Fee 8021 Recording each patent assignment per 40 8021 40 Code Code (\$) (\$) property (times number of properties) 40.00 1202 18 Claims in excess of 20 2202 1809 750 2809 375 Filing a submission after final rejection 1201 84 2201 42 Independent claims in excess of 3 (37 ČFR § 1.129(a)) 1810 750 2810 375 For each additional invention to be 1203 2203 140 Multiple dependent claim, if not paid 280 examined (37 CFR § 1.129(b)) ** Reissue independent claims Request for Continued Examination (RCE) 1204 84 2204 42 1801 750 2801 375 over original patent Request for expedited examination 1802 900 1802 900 of a design application ** Reissue claims in excess of 20 1205 18 2205 9 and over original patent Other fee (specify) SUBTOTAL (2) \$ 1,938.00 or number previously paid, if greater; For Reissues, see above. SUBTOTAL (3) (\$) 40.00 *Reduced by Basic Filing Fee Paid

> WARNING! Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Registration No.

(Attorney/Agent)

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.